THE MARINE RECORD

DEVOTED TO NAVIGATION, COMMERCE, ENGINEERING AND SCIENCE.

VOL. X NO. 39. CLEVELAND, O., OCTOBER 4 1888. $2.00 PER ANNUM SINGLE COPIES 5 CENTS

AROUND THE LAKES.

CLEVELAND.

A bold thief, Saturday afternoon, stole $500 by means of an old-time trick. About 2:45 o'clock Captain Daniel Wiesel, of Detroit, master of the tug J. P. Clark, presented a check for $628.50 to the paying teller of the Commercial national bank. He was handed a package containing $500, in five, ten, and twenty dollars bills, and $128.50 in bills and silver. The banking house was crowded at the time and Captain Wiesel moved from the teller's window a few feet, and placing his money on the railing began to count his silver. His attention was attracted to a one dollar bill lying at his feet, which had undoubtedly been dropped by the scheming theif. The captain, holding the loose bills and silver in his hands, stooped to pick up the dollar which he supposed he had dropped, when he felt a hand pass over his shoulder and grasp the $500 package which rested on the railing. The mariner turned quickly, but only in time to see the robber vanish through the door. Captain Wiesel raised an alarm, and Patrolman O,Donnel, hearing the calls, rushed down Superior street and up the bank steps. The victim of the bold robbery stood in the door, and in a few words explained the matters to the policeman. The bank was full of people, and O'Donnell stood in the door and called out, "Is there any one here who can describe the thief?" No reply was received, and in answer to individual queries the policemean ascertained that the people in the bank had been engaged in their own transactions and had not noticed the robber. The paying teller did not notice the robbery. Captain Weisel was unable to desribe the thief, but several boys on the street said they had seen a man leave the bank in a hurry and walk quickly down Superior street. The robbery was reported to the Central police and detectives put upon the case.

The first severe storm of the season had spread itself over the chain of lakes before midnight Monday night. Tho weather had been heavy on Lake Erie all of Sunday night and Monday morning and the propeller John Craig was held outside of Lorain on account of the low water and big seas, while the schooner Sumatra was outside off Ashtabula and the Moravia off Fairport. Inside the Cleveland breakwater thirteen craft were at anchor and as many more were in port unwilling to venture out. Towards evening the storm lost some of its force and the Craig, Sumatra and Moravia reached this port. After dark a gale was again blowing off this port, but the steamer City of Detroit went out on time. The big sidewheeler had hardly left port when the Kaliyuga, which had gone out light for Erie, returned.

The Globe Iron Works are building a new set of offices, and it is expected that the work will be far enough advanced to allow of vacating the present quarters by December.

At the Cleveland drydock since our last publication, they have had the tugs James Amadeus, and the N. B. Gates, in for caulking and overhauling rudders, and stern bearings, the steambarge Oregon for new Hodge propeller wheel and repairs to stern post, schooner South West for a general overhauling, tug American Eagle for caulking etc., the steambarge Jim Sheriffs for repairs to stern bearings, caulking butts in her bottom, and some main deck caulking etc., she will be followed by the steambarge Smith Moore to stop a leak.

The Cleveland Ship Building Company are fast finishing the Michigan Central ferryboat and we hope in our next issue to be in a position to name the date of the launch of this superior vessel.

We are pleased to note the return of the Cleveland Shipbuilders, Messrs. Quayle, Pankhurst, Radcliffe and Jackson, and trust that their vacation has been an eminently enjoyable one. The future may develop signs of their late tour, in additional items displayed around and on a vessel. Our townsmen have been shrewd enough to notice some good points in the many shipyards visited along their route.

DETROIT.

Special Correspondence to the Marine Record.

The Michigan navigation company of Detroit has sold for $100,000 the steamer T. W. Palmer and consort David Vance to Brown & Co., vessel agents of Buffalo, and Ben Bird all of Bay City. Possession has already been taken. The former owners agree to permanently repair the damages sustained by collision with the steamer Gladstone on the St. Clair river. No change will be made in masters. The Palmer was built in 1880 by the Detroit drydock company, was given an A1½ rating this season, and carries about 1,500 tons. The Vance was built by Burger at Manitowoc in 1874, rates A2, and has about the same capacity as the Palmer. The register valuation of the Palmer is given as $70,000 and of the Vance as $30,000. They make a fine pair.

The steamer J. E. Owen was released from Grosse point Monday by two most powerful ferryboats and proceeded with her consorts. She will probably not get beyond the St. Clair canal until the water rises.

The Detroit yacht club held their annual race here for the club pennants last week, and the races were fairly exciting and well contested. In the second class race, the Lulu B beat the Turk by 49 minutes in a five hour race. In the 4th class the Madeline beat the Aldina R. by 44 minutes 49 seconds. In the fifth class the Cyclone beat the Let Her Be to the tune of one hour nine minutes sixteen seconds in about a five hour race. In the sixth class the race seems to have been a closely contested one for the Truant only got away from the Lillie B. in one minute and fifty seconds in a race of three hours and a half.

The tug Justice Field is at Hodge's Riverside works for a new air pump. and also for one of their noted wheels. The steamers Lakeside and Gazelle for repairs to machinery, also the tug Swain. They have recently placed a new propeller wheel on the steamship Spokane.

The Eagle Iron Works has in course of construction a fore and aft compound engine, cylinders 12x23 inches diameter, and 18 inch stroke for Captain R. Armstrong, of Bay City.

The Frontier Iron & Brass works are constructing an engine patented by Messrs Baker & Huyck, said to be superior to anything in the engine line yet invented, and to surpass even a Corliss engine in every particular. The patentees have been at work on this engine for a period of four years, and the various parts of the machinery are covered by patents taken out as late as the present year. Mr. Roberts, who has a controlling interest in the machine, and is also the general manager of this firm, informs us that the engines will work a revolution in marine mechanism, and he claims that for yachts and light purposes especially the new engine will prove itself to be invaluable, inasmuch as one of his engines carrying 120 horse power will stand in one eighth of the space required for any other engine of similar power. This machine is named a concentric piston engine, with patent reversible power, and judging from the patents granted it will prove at least a a new departure in motive steam power.

Samuel F. Hodge & Co. have taken contracts for a new 30x36 high pressure engine for Captain Du Lac of Mount Clemens, also a 15 and 30 by 28 stroke fore and aft compound engine to be supplied by an 8x13 fire box boiler, for a tug now building for Captain Ira H. Owen of Chicago.

The barge recently built at Oades shipyard for Chas. Hebard & Son of Pequaming, Michigan, is giving good satisfaction to her owners. There is a general clearing up at this yard, but no new work there just now.

The east end boiler works are busy filling local orders.

The Detroit dry docks is busy on new work. At their yard in Wyandotte four composite vessels have been contracted for, and their completion will be pushed on as fast as possible. These boats are builing for the undermentioned firms and are numbered as follows: the Percheron Steam Navigation Co. No 90: The Inter Ocean Transportation Co., No. 91; The Michigan Navigation Co, No. 92; and No. 95 is to be built on speculation, the first two of these vessels will be out in May, the other two in July. At their east end drydock, they have also the keel laid for No. 94, a large wooden steamboat to be built for sale. Length 296 feet, beam 42 feet, and moulded depth 23 feet.

At Clark's drydock they have a wooden boat well in frame, building to the order of Messers Fitzgerald, Egan & Armour. Her length will be 260 feet, keel, 40 feet, beam and 23 feet moulded depth. This vessel is numbered 93. Both of these boats will be ready for the opening of navigation next spring and will be fitted with all the modern improvements. Later particulars of this fine fleet of vessels will be furnished as their building progresses.

H. D. Edwards & Co., ship chandlers provided the barge Prussia with a new nine inch line, when she passed through here Tuesday in tow of the Canadian steambarge D. D. Calvin.

At Thurston's boat yard they are busy on new work.

Captain Ruelle's tug J. L. Miner, brought up the new City of Detroit, from Wyandotte on Monday. Work will be hastened on this boat at the wharf of the Detroit Drydock Company.

F. W. Wheeler of Bay City will put in a sail and rigging loft in connection with his works.

Captain Morley, of Marine City will shortly lay the keel of a new boat to be built on the lines of his last new boat, the W. H. Morley.

The wrecking tugs, Storm King and Sea King, are laying on the Canadian side of the river awaiting business.

The steamer City of Detroit looked no worse on her arrival here, after her battle with the elements on Monday night. She was the only vessel that left Cleveland in the teeth of the late gale, making the passage in very little over the usual time.

The Central Boiler Works are fast closing out old contracts, and have recently been figuring on new business.

The Detroit and Michigan yacht clubs have arranged for a regatta to take place on the fifteenth of October at 10 a. m. The course to be appointed later on. It is expected that the contests will prove very interesting.

Articles of association were filed for the Lake Transit line, a corporation formed here last July. The capital stock of the company is alleged to be $1,000,000. The amount actually paid in is said to be $100,000. The stockholders are given as Samuel A. Murphy, Detroit, 3,200 shares; Thomas Murphy, Detroit, 600 shares; William J. Murphy, Phœnix, Arizona, 200 shares. The general office of the corporation is to be located in Detroit. SWAIN.

SANDUSKY.

W. D. Crane, who has for some time past had on foot here a project for the establishment of a large drydock and shipyard, has been in the east for several days past in consultation with parties there and has written a letter to persons here who are interested in his scheme announcing that he has changed his plans somewhat and will within a few days submit a proposition which he believes, if accepted, will enable him to go ahead with the work on the shipyard this fall. Crane, it is understood, expects to arrive here some day next week to perfect his plans

TWO RIVERS.

The schooner Monguagon, of Detroit, ore-laden, bound from Escanaba to Wyandotte, Michigan, ran aground Thursday night five miles north of this port. She was released by the tugs Albatross and Comet after jettisoning about thirty tons of ore, which had to be done by the life-saving crew, the sailors being exhausted.

CHICAGO.

Special correspondent to the Marine Record.

Last Thursday morning the schooner Fleet Wing, Captain Peter Peterson, laden with grain for Midland, arrived at this port, having encountered a heavy north-easterly gale, compelling her to run back, the chain plates of her fore rigging having given out. The schooner C. C. Trowbridge, light, ran back having lost some of her sails. The schooner Coral, light, ran back she was some 30 miles off Grand Haven, the port she was bound for, when some of her headgear gave out, and Captain Wm. Dall fearing that she would lose her foremast, put her about and made for Chicago, where he repaired her headgear.

Friday afternoon the schooner Isabella Sands, lumber laden, in tow of the tug May Flower collided with State street bridge, doing considerable damage to the bridge, and carrying away the schooner's jibboom. The May Flower has only recently commenced towing, having been engaged in the passenger business during the summer months. We hope Captain Dahlke will have better luck with towing in the future, otherwise his summer profits will be eaten up by his fall losses.

Captain Blend of the propeller Roanoke, on his arrival last Saturday morning, reported that William Martin, second engineer, was lost overboard Thursday morning between two and three o'clock, off the South Fox Island, in a heavy gale and sea. The unfortunate man started from the engine room to go forward, and was never seen afterward. He was aged about thirty years and single, and was a resident of Green Bay, where his parents reside, his brother Joseph is chief engineer on the Roanoke.

The steamer Pilgrim brought over 50,700 baskets of peaches in three trips, last week from Saugatuck.

At the Chicago Drydock Co's the steam barge White and Friant was in drydock for calking and general repairs, the schooner Oak Leaf for bottom calking, the schooner Isabella Sands received a new jibboom, the schooners Resumption, Jessie Drummond, and Hunter Savidge some general repairs.

At Miller Bros. Drydock Co. the steambarge A. D. Hayward was in dock for repairs to her shoe, the schooner Sunrise for calking, the steamer Pilgrim for repairs.

Brice A. Miller of the firm of Miller Bros. is away on a vacation. He has been visiting the One Thousand Isles, St. Lawrence River, Quebec, Montreal, Oswego and New York.

Miller Bro's. sloop yacht Minnie M. took a large party to South Chicago last Sunday, to an excellent clam bake. She was in command of Captain John Prindeville, and made the return run between South Chicago pier and Chicago in fifty seven minutes, finishing up a very successful season, having won the only two races in which she was a competior.

The Chicago underwriters have fixed the trip rates on grain, for the first half of October as follows: To Lake Michigan ports 50c; Lake Superior ports, 80c; Lake Huron ports, Sarnia and Detroit River, 65c; Georgian Bay and Erie, 75c; Lake Ontario and Ogdensburge, 85c; Montreal, $1,10.

The vesselmen are energetically pushing their project to lower Washington street tunnel. A committee waited upon Commissioner Swift Friday to learn his views, and he told its members that the tunnel was virtually out of the city's control. If they wish to have anything done they must see Yerkes and arrange matters with him before he put down his west side cable road.

The Vesselman's committee, consisting of William Harmon, J. L. Higgie, and J. S. Dunham, called upon Mr. Yerkes Saturday and talked over the project of lowering the Washington street tunnel to twenty feet below the river's bottom. Mr. Yerkes was willing to submit to any changes in the plans for repairing the tunnel which the city might adopt if the city would pay the additional expense. In fact, he rather desired to have the tunnel's roof lower so that vessels would not strike it in passing over. All he asked was that the changes in the plans be made at once, so that the entire work could be done at the same time. He should most strenuously object to touching the tunnel after the cable road was running through it. The committee was satisfied with the outcome of the conference, and will push the movement. The aid of the Lake Carriers' Association, which includes in its membership most of the large vessel owners along the chain of lakes, has also been called in.

Notwithstanding the heavy gale of Monday night, the Goodrich Co's steamer Sheboygan arrived on time Tuesday morning, from Milwaukee, and the propeller Menominee, which did not leave Grand Haven until 1 a. m. Tuesday morning, in consequence of the heavy gale, arrived here at 12:30 p. m. Tuesday. WILLIAMS.

The schooner Lizzie A. Law on Tuesday night had her mainboom and a big stretch of canvass carried away.

Simon E. Johnson, a seaman aboard the barge Mayflower, fell down through the main hatch of that vessel and sustained severe injuries about the hips and back.

The Chemung struck the schooner Carrier, stem on at the "forks". She hit the Carrier on the starboard side just aft of the foremast, the strain severing the stern line and smashing in a dozen or more feet of her bulwarks.

Companies represented by Elphicke & Co. had about $4,000 on the lumber cargo of the R. M. Rice.

It was a mass of glowing ashes from the donkeyhoist which fired the barge John Breden on Tuesday night.

The propeller George T. Hope of Cleveland experienced an awful night last Monday and nothing but her superb build and the masterly manner in which Captain Flick handled the big boat prevented her foundering. At 9 o'clock Wednesday night, when it was pitch dark, the sea rolling furiously and the wind blowing a hurricane, the rudder chain gave way. It snapped asunder under the pressure of the rudder like a reed. The big ship broached to, gave a mighty lurch, and before a soul aboard knew what had occured, the huge mass of iron, steel and wood was buffeting helplessly about in the trough of the tempest-tossed sea. The sails, fore and main, were torn into shreds and clear of the bolt ropes. Her water tanks, securely battened down, were lifted bodily from their fastenings and together with fenders and all other matter on deck carried overboard. After the ship had broached to a temporary tiller was rigged and with eight men to man the steering apparatus and four men between decks the ship was finally brought head to the wind.

OTTAWA.

Three wrecking tugs, with a full wrecking plant, owned by Murphy, of Detroit, have been seized at Algoma mills. These vessels were originally Canadian, but all of them have been repaired in the United States and the names of two of them have been changed; but as they were repaired in the United States, a duty has to be paid on such repairs. The two vessels which had their names changed, not being American registers, can neither enter nor clear at Algona, because they have no port of hail. The commissioner of customs has ordered that the vessels be detained until proper explanations are made. Later advices say that these boats have been Americanized.

STURGEON BAY.

The tug Spaulding, returned Wednesday evening from the schooner Fleetwing, which went ashore at Garrett's Bay during the recent gale. She is a total loss, having gone to pieces soon after having the pumps placed on board. The pumps were recoxered with some difficulty they having settled through her decks when she broke up.

PORT SANILAC.

The bodies of the five people from the barge St. Clair, drowned here Tuesday morning when the Srnd Beach lifeboat was swamped, have all deen recoverrd.

MARITIME LAW.

FREIGHT—DELIVERY OF CARGO—DELAY—DEMURRAGE PAID WHILE WAITING FOR CARGO—SET OFF AGAINST FREIGHT—BILL OF LADING—EVIDENCE.

U. S. District Court, Southern District of New York.

1—Libellant contracted to bring cargo in his canal-boat from New Haven and deliver it to respondent on a schooner at Perth Amboy. Through delay of the canal-boat, respondent was compelled to pay demurrage to the schooner. This he claimed to offset against libellant's freight, and his suit was brought to recover the full freight. Respondent claimed that the cargo was to have been delivered on a day certain, which had not been done; libellant asserted that his contract was simply to deliver as expeditiously as possible. The bill of lading fixed no time for the delivery of the cargo. Bad weather was the cause of libellant's delay. *Held*, that the burden was on respondent to establish a day certain for the delivery of the cargo, and that, on the evidence, this had not been done. As there was no proof of lack of reasonable diligence on libellant's part, *held*, that he was entitled to his full freight.

2—Parol evidence cannot be used to insert in a bill of lading a warranty for the delivery of cargo on a particular day.

BROWN, J.

The above libel was filed to recover the freight for transporting 114 tons of tankage in November, 1 387, from New Haven to the schooner J. H. Parker, lying at Perth Amboy. The respondents claimed a deduction of $75, which they had been obliged to pay the Parker for the detention of their vessell while waiting for the tankage; and they alleged this to be a legal offense on account of the failure of the libelant to transport the tankage expeditiously and to deliver it on the 9th of November, as they alleged was agreed. The balance of freight was tendered and deposited in court.

The original contract was made on the 3d of November between the libellant and Mr. Schmaltz, who was acting on behalf of the respondents. There was no written memorandum of the contract. Mr. Schmaltz testifies that it was definitely agreed that the tankage should be delivered on board by the 9th. The libelant denies any such agreement. There is no doubt the respondent desired to have the tankage delivered as soon as possible, and that Mr. Schmaliz so stated to the libellant. After the interview, a written agreement was made by the respondents for the delivery of the tankage to the schooner on the 9th of November. The tankage was not, however, loaded until the 11th, and was not delivered until the 16th.

At the time of the conversation with the libellant, Mr. Schmaltz understood that the canal-boat "Bill Stanley," on which this tankage was to be brought to New Haven, was then loading salt at Brooklyn, and that after being loaded, she was to be towed to New Haven, unloaded, and then loaded with the tankage, and to be thence brought to Perth Amboy. The respondents were aware of the delays that ensued, and that the boat was not loaded at New Haven until the 11th, two days after the time they say it was agreed the tankage was to be delivered. The bill of lading given on receipt of the tankage on the 11th, fixes no time for its delivery. Several interviews were had between Mr. Schmaltz and the libelant for the purpose of hurrying up the tankage, at some of which Mr. Schmaltz testifies that the libellant agreed to send a special tug to secure immediate delivery. The libellant testifies that all he agreed to de was to hurry up the delivery as fast as possible.

The burden of proof is upon the respondents to establish a positive day for the delivery of the tankage. The circumstance that after the original bargain, the respondents agreed to deliver to the schooner by the 9th, by their written contract with the latter, is, doubtless, entitled to some weight; but it is not at all conclusive. The time would have been suffient had the weather been good, and Mr. Smaltz doubtless supposed that the 9th was time enough. Had the agreement with the libellant been for a delivery on a day certain, it would have been more natural to put the contract in writing. Several passages in the testimony as to the subsequent conversations are most compatible with the libellant's statement, that his agreement was only to transport the tankage as soon as possible, without contracting positively for a fixed day of delivery. The tankage was not taken on board at New Haven until two days after the 9th.

I do not find any statement that the libellant at that time was charged with breach of contract in not being loaded by the 9th. If the contract had been for a positive delivery at Perth Amboy by the 9th, it would be remarkable that the boat should be loaded on the 11th, and nothing said before loading as to and claim of special damages for the delay. In loading on the 11th it is scarcely reasonable to suppose that the libellant understood he was loading under a positive contract to deliver on the 9th. It was not until days afterwards that any claim for demurrage of the schooner while waiting for the tankage, and could only be recovered up in a special contract made in reference to the schooner with a liability to this special damage understood and fairly within the contemplation of the parties. See the Parana 2 P. Div. 118; The Ginlio, 34 Fed. Rep. The proof in this point would be insufficient to sustain the special damages claimed.

If the bill of lading signed by the master of the canal-boat on the shipment of the tankage were looked to as the final contract of transportation, parol evidence could not be resorted to, to engraft upon it a guaranty or warranty for the delivery of the cargo at a particular day, since that would add materially to the written contract, by throwing upon the libellant all the risks of the weather and of the navigation. The bill of lading cannot be thus altered by parol proof. Rawson v. Lynn, 23 Fed. Rep. 107; Leduc v. War, 20. Q. B. Div. 475.

Aside from the bill of lading, however, I am not satisfied that the libellent made a positive contract to deliver on the 9th, or to do more than facilitate the delivery all in his power. During the 13 days that elapsed between the making of the contract and the actual delivery, the weather for at least six days was so bad as to make navigation on the Sound in such boats improper and dangerous. Other tugs and tows were obliged to tie up for better weather. Several days were lost in getting away from New York.

Had it been proved that any tow available to the libellent left New York for New Haven on Saturday evening, it would have been the libellants duty to forward the boat bo that tow. But his boat would have arrived in New Haven only one day earlier, and would not probably on her return have arrived in New York more than one day sooner. But there is no proof that any one tow left upon that Saturday, and the evidence shows that the boat was forwarded to New Haven on the first fit day afterwards.

In the absence of a specific contract to furnish a special tug, it was certainly not the duty of the libellant to incur that expense. The evidence shows that the cost of it would have exeeeded the whole freight agreed to be paid. The libellants denial of the alleged agreement to send such a tug is strengthened by its extreme improbability.

As I cannot find a positive contract to deliver on the 9th of November and as the bill of lading fixes no particular day; and as the evidence does not establish any lack of reasonable diligence on the libelants part in the transportation of the tankage, considering the rough weather, he is entitled to a decree for the full amount of the freight, with costs.

June 1 1888.

CANADIAN CANALS

The great lake and river system of Canada has been made continuously navigable for a distance of 2,384 statute miles by a connecting chain of ten canals, comprising 71¾ miles of artificial navigation. This system extends from the Straits of Belle Isle to Thunder Bay, at the head of Lake Superior. The following table of distances indicates also the respective positions in statute miles of these canals thus: Straits of Belle Isle to Father Point, 643; Father Point to Rimouski, 6; Rimouski to Quebec, 177; Quebec to Three Rivers (or tide waters), 74; Three Rivers to Montreal, 86; Lachine canal, 8½; Lachine to Beauharnois, 17¼; Beauharnois canal, 17¼; Ste. Cecile to Cornwall, 32¾; Cornwall canal, 11½; River and Farran's Point canal, 16½; Rapide Plat canal, 4; River and Point Iroquois canal, 7½; Junction and Galops canals, 4⅝; Prescott to Kingston, 66⅝; Kingstonto Port Dalhousie. 170; Port Dalhousie to Port Colborne (Welland canal), 27; Port Colborne to Amherstburg, 232; Amherstburg to Windsor, 18; Windsor to foot of St. Mary's island, 25; foot of St. Mary's island to Sarnia, 33; Sarnia to foot of St. Joseph's island, 270; foot of St. Joseph's Island to Sault Ste. Marie, 47; Sault Ste. Marie canal 1; head of Sault Ste. Marie to Pointe aux Pins, 7; Point aux Pins to Duluth, 390. Add to this the 2,234 statute miles, distance from the Straits to Liverpool, and it gives a total navigable length of 4,618 miles from Duluth, the extreme head of Lake Superior, to Liverpool. The difference in level to be overcome, to where tidal influence ceases, is about 600 feet. Of this, the Canadian canals, with a total number of locks, overcome a height of 532¾ feet. The one mile long Sault Ste. Marie canal, built by the United States, has one lock, lifting 18 feet. The size of the locks in this system ranges from 200 to 270 feet in length by 45 feet in width. The depth of the water is from 9 to 14 feet, and the government intends to make the whole route fit for vessels of 12 to 14 feet draught of water. The canal route from Montreal to Ottown and Kingston has a total length of 246¼ miles, with 59 locks exclusive of the Lachine canal, and a lockage of 533½ feet. The new works on this route give 9 feet water in locks 45 by 200 feet. Canal navigation is secured between the St. Lawrence and New York by means of the Richelieu river and Chambly canal. This has 9 locks with 7 feet depth of water; and connected by Lake Champlain with United States Erie canal and the Hudson River; a total distance of 411 miles. Of the Trent river navigation, between Lake Huron and the Bay of Quinte of Lake Ontario. 235 miles, only part has been made navigable, chiefly for the passage of timber. and 155 miles distance is available for light draught vessels. Finally, there is the St. Peter's canal, cut through an isthmus half a mile wide. between St. Peter's bay on the Atlantic, and the Bras d'Or lakes of Cape Breton. It has a lock 48 by 200 feet, with a depth of 18 feet and a breadth of 55 feet. The government of the Dominion has decided upon enlarging the St. Lawrence system and connecting a new canal on Canadian soil at Sault Ste. Marie, which will give an immense impetus to the national carrying trade.—*Toronto Empire.*

AN IMPORTANT MARINE SUIT.

At Chicago a suit to secure a judicial interpretation of section 18, of the act of 1884, limiting the liability of vessel-owners, was commenced by the Dunham Towing and Wrecking Company, through Charles E. Kremer, proctor, against A. D. Hayward, formerly owner of the schooner Maggie Thomson. The case was brought as a libel in personam on Hayward, in the United States district court, and arises out of a towing bill of $81. which the Thomson incurred early in the season. After she had sailed several trips she capsized in Lake Michigan, and was abandoned by her owner. Captain Dunham then demanded his towing bill, which Hayward refused to pay, claiming that the boat was alone liable for debts contracted by her, and that his liability was limited by the act of 1884, which said that "the individual liability of a shipowners shall be limited to the proportion of any or all debts and liabilities that his individual shares of the vessel bear to the whole; and the aggregate liabilities of all the owners of the vessel on account of the same shall not exceed the value of such vessels and freight." Issue is taken with this construction of the statute. It is claimed that as the owner received the amount earned by the vessel when these bills were made he is liable personally for them. It is also claimed that such a construction of the statute law makes it possible for a dishonest owner to pay his debts by the sinking of his vessels after loading them down with debts. while at the same time pocketing their profits up to the time of their loss. The courts have never been called upon to pass on the law, and the case is therefore of wide importance to marine men. Captain Dunham has also had a bill against the Thomson for towing her to Milwaukee after she had capsized, which he had not fully recovered, but that bill does not enter into this suit.

FRESH AND SALT WATER DRAFT.

Recent issues of the *Seaboard* contained queries from several of its readers, on this most interesting question, which were answered according to our best lights. The *American Engineer* has taken hold of the subject, and adds the following interesting and well-written article to the literature of the discussion:

"Take, for example, a common cargo steamer 200 feet long on the water line, 32 feet wide, and drawing 15 feet of water when loaded. Set the displacement at this draft down to 1,920 tons, and the area of her water line to 5,250, this is what would be professionally called a 'full' vessel, or a vessel that can carry a considerable amount of cargo for her size. Now this vessel will, if loaded to, say 15 feet in fresh water, her total weight then being 1,920 tons, and going out into the Atlantic ocean, draw only about 14 feet 7¾ inches. That is to say, she has raised herself out of the water not less than 4¼ inches. How can this be? Simply because as before said the weight of the ship is equal to the weight of water she displaces, and so long as the vessel remains in the same water her draft will be the same. On the other hand, as the water displaced must be equal to the weight of the ship, therefore, when the ship is moved from lighter water into heavier, it is evident that it takes a less amount of such water to make up the weight of the ship than is needed of the lighter water, and hence there must be a reduction in the volume of the salt or heavy water displacement, as compared with the light or fresh water displacement. This reduction of volume in the displacement cannot be effcted in any other way than by the ship lifting herself out of the water.

"The difference between salt and fresh water draft in the Oregon, that splendid specimen of model naval architecture now resting at the bottom of the Atlantic, a few hours from New York was just about six inches. If we suppose that the fineness of the water line in the Umbria is somewhat greater than the Oregon, and this is very probably the case, then the dimensions of the Oregon being 500 feet by 53 feet, and needing about 47 tons to depress her one inch, at a draft of 24 feet, then we may estimate the Umbria thus: Her length is 500 feet; beam, 57 feet; displacement 9,860 tons. Now, this being a rather wider vessel, but, as said, very likely a trifle sharper at the ends, we will assume that 49 tons is needed to depress the Umbria one inch at a draft corresponding to a displacement of 9860 tons, and the result would then be that this vessel will draw about 5⅛ inches more in fresh water than in the Atlantic.

"Of course, as the drawings of the vessel are not before us, we may be somewhat in error, but, comparing her case with the Oregon's figures, and using our own judgement as to the slight difference in the forms of the water line, we are satisfied that we are as near as could possibly be measured were the vessel in perfectly smooth water in the different seas, so to speak. It does not necessarily follow, from what has been said, that the larger vessel alters its draft more than a somewhat smaller, as the relative values of displacement and area of water line may in different ships bear different relations to each other, and as it is the value of both these elements which governs the alterations in draft, it will be seen that two ships of the same length and beam may be very differently affected.

"It is also evident that this alteration in draft does not take place instantly or by any sudden umps, but as the ship leaves a fresh water harbor it gradually raises itself out of water as the percentage of salt grows heavier. When coming in from salt water it gradually sinks as it enters the fresh. There is, as will thus be seen, nothing strange in this lifting and sinking of the vessel in salt or fresh water, but we think few outside of the profession have observed to what great differences this salt percentage really leads. A steamer leaving Europe for the United States may, when she started from Europe, have had a draft of water of say 22 feet, but may be found on her arrival in the Hudson river to draw only 20 feet, although she then is in fresh water. This is really because she has consumed coal, provisions, water, etc., a consumption which accounts for the lighter draft, and is furthermore, a reason why the vessel is considerably weake or not so stable as when she left Europe.

"For, inasmuch as the coal, etc, has been taken out mostly from the bottom of the vessel, the centre of gravity of the vessel has been raised, thereby diminishing the stability and we venture to say that a great many vessels are so designed, that although they may have stability enough when commencing their voyage, after steaming some 3,000 miles, they are in a similar condition to a drunken man, that is, anything may turn them upside down. This can only be remedied by giving greater beam, and the latest of the Greyhounds' are, in fact, much wider than their predecessors."

OVER THE RAPIDS ON A LOG.

"There's a man going over the rapids on a log!"

This alarming cry issued from the mouth of one of the employes of the Edison Light and Power company last Saturday and was as startling in its effect upon the hearers of it, as the shout "Man overboard!" is to those on shipboard. Only those who know the velocity of the current and the tremendous power of the cruel and angry waters as they eddy and swirl around the huge rocks, can properly appreciate the grave import of the man's shout. Nobody had ever attempted to shoot the rapids on a log, and on every occasion where a human being had been drawn into the current he has gone down to certain death. torn to pieces by the mighty force of the water. The skilful canoeists among the Indians have two or three channels through which they pilot tourists, and they take good care to keep in the channel and clear of the rocks. which if touched by the frail boats would snap them like pipestems and destroy the lives of the occupants.

The man, then, who would deliberately attempt to make the half mile passage with only a slippery log between himself and eternity must be either crazy, or a fool; that, at least, would be the opinion of sane men.

The daring rider had passed under the International bridge when he was discovered. He was well over to the Canadian side and was standing erect upon two logs balancing himself with the skill of an experienced log driver. A moment more and he was into the churning rapids. The spectators held their breath, expecting every minute to see him lose his foothold and disappear in the seething waters. The logs were swept swiftly, down, now standing almost on end and again turning completely around in some vicous whirlpool, but all the time keeping well together. With wonderful agility the man maintained his position, jumping from one log to the other and bobbing about like a buoy. Down into the big rapids he sailed. Up on the crest of a tremendous wave he hesitated for a second, then the logs pointing downward like the bow of a ship at sea in a terrific storm, he and his frail support disappeared from sight.

"He's gone," said the spectators. But no he was up again in a moment riding the logs like a centaur. The interested observers breathed freer as he pushed his way onward apparently avoiding the rocks, and the most dangerous whirlpools, the rapids floating peacefully and serenely down the St. Mary's river. An investigation as to his identity led to the discovery that he wase not a man. He was a root, a straight, upright root, attached to one of the logs. From the shore, a considerable distanee, the root looked to the naked eye, like a man and the movement of the waters made it appear as if he were umping from one log to another. Thus was a nice sensation spoiled.—*Sault Ste. Marie News.*

A new material of special interest to ship and yacht owners and builders has been brought out by Mr. W. Wells, chemical manufacturer, Leith. The only material hitherto available for forming white deck seams has been putty, a material possessing only very limited powers of cohesion, and without either elasticity or strength—so essential in any caulking substance—to enable it to retain its hold of the timber during the expansion and contraction of the deck under weather influences. The fact of such a novel material as white pitch having been invented, which can be melted and run into the seams in the same manner as ordinary pitch, and possessing strength, elasticity, and adhesiveness, is of great interest to ship and yacht builders and owners, to whom such a substance as white pitch has long been regarded as a desideratum. The new material has a high melting point, and is, we are informed, stronger and more tenacious than ordinary pitch.—*The New York Engineer.*

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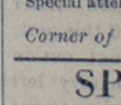
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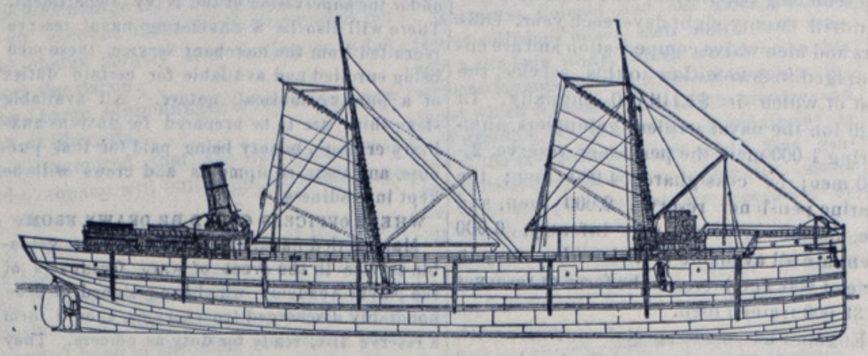

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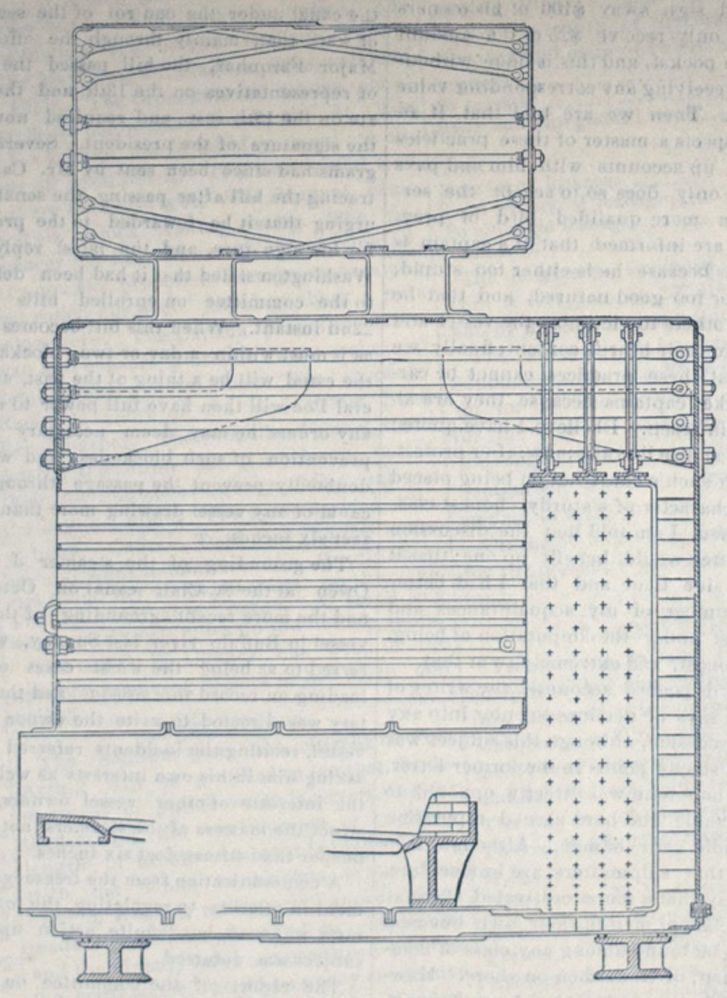

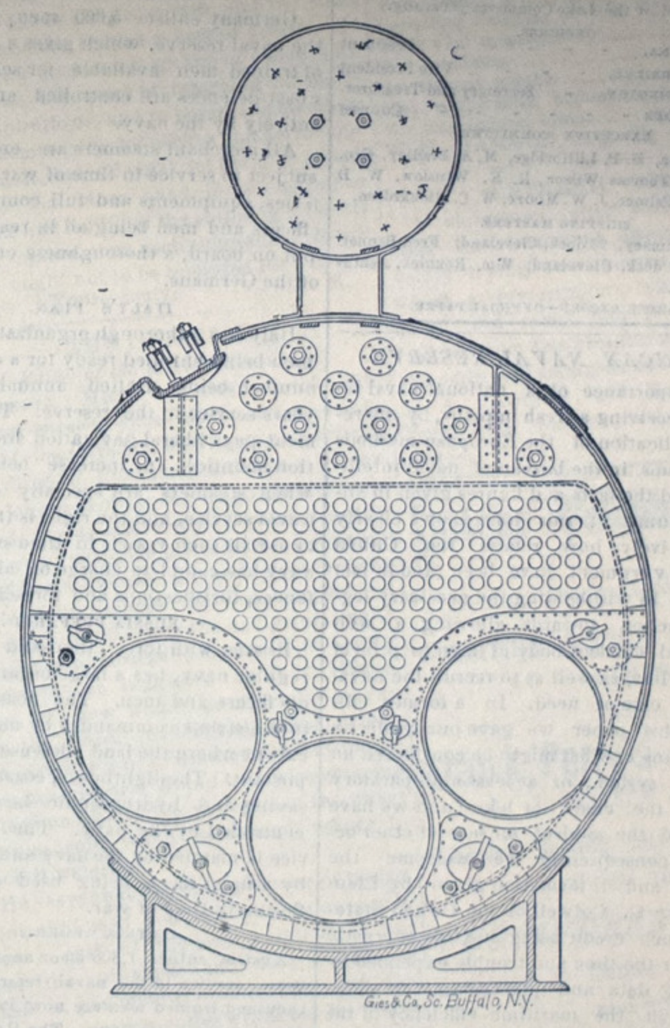

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Published Every Thursday at 144 Superior Street, [Leader Building] Cleveland, O.

A. A. POMEROY, EDITOR AND PUB

BRANCH OFFICE:
252 South Water Street, Chicago, Illinois.
THOMAS WILLIAMS, Associate Editor.

TERMS OF SUBSCRIPTION:
One year, postage paid.....$2.00
Six months, postage paid..... 1.00
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MARINE RECORD—OFFICIAL PAPER.

AMERICAN NAVAL RESERVE.

The importance of a national naval reserve is receiving a fresh impetus, by the recent publication of the European methods and systems in the bureau of naval intelligence, and the facts and figures given in another column of this issue shows clearly and dicisively how remiss the United States government have been (and in fact still are) in withholding the necessary legislative action towards allowing a well drilled and efficient body of men to protect our coast line, as well as to recruit the naval forces in case of need. In a former edition of this paper we gave our readers a brief outline of what might be considered an adequate system, or at least a preparatory one for the chain of lakes; and we have mentioned the subject on several other occasions, consequently we welcome the statistics and information given by Lieutenant J. C. Colwell of the United States navy, much credit being due this energetic officer for the time and trouble expended in gathering data and presenting it to all interested in the maritime efficiency of the United States. Yet, in connection with this subject we think it our duty to state that the service ought not to be hedged around with all manner of clauses, and qualifications of candidates. But on the contrary a liberal code of requirements and terms, relative to age, occupation, and retaining fees, and service, ought to obtain for a period of five to ten years, and at the expiration of that time the service would be so well manned and constructed, that more stringent requirements, and a higher grade of qualifications might be enforced without crippling the annual number of enlistments. Besides this the initiatory steps will need to be made smooth and easy, so that our naval reserve service will meet with a strong popular favor, and candidates from all paths of life who have a predilection for this kind of work, (and none others would apply), would be permitted to enter the service to become proficient in the several lines of drill, for coast and local defense, and out of the number, or total enlisted at a certain station, a class could be picked out, and taught the various special duties connected with the service, including the necessary instructions for working torpedoes.

Should this general system be considered advisable we are confident that a larger number of men would be available than is generally supposed, especially on the chain of lakes and the navy department would find themselves agreeably surprised at the number of applications for enrollment at the large fresh water ports. The following extract from the *N. Y. Herald* will no doubt be interesting to many of our readers.

THE ENGLISH METHOD.

Although England has a force of 55,000 trained men in her regular navy, men who have handled all kinds of modern weapons for years past, she has an enrolled naval reserve of 264 officers and 18,000 men from the seafaring population, who are called out for drill twenty-eight days each year. Officers and men waive compensation and are encouraged to devote time to this service, the cost of which is $1,118,000 annually. In addition the naval artillery volunteers, numbering 1 000 men; the pensioner reserve, 2,000 men; the coastguard, 4 000 men; the marine pensioner reserve, 2,000 men, and the marine artillery and infantry, 6 000 men, are all available to assist the navy in time of war and increase the force of reserves to 33 000 trained men.

England has made special contracts with the Cunard, White Star and Peninsular and Oriental steamship lines by which their fast vessels may be used as cruisers in time of war. The Britannic, Germanic, Adriatic, Celtic, Etruria, Umbria, Aurania, Servia and Gallia and many other vessels are thus available and their guns and equipments are all ready to be sent on board the instant they are needed.

THE FRENCH SYSTEM.

France, with 40,000 men in her regular navy, has 160,000 men enrolled available as navy reserves, a large number being drafted annually to serve a term of years in the reserve. The marine artillery and infantry numbering 20,000 trained men, are also available for coast defence. The coast is divided into districts commanded by naval officers, each with its local defensive system and torpedo service, with a rendezvous for the reserves. France pays liberal navigation and construction bounties for all ships built in France, increasing the bounty when ever ships are constructed specially for auxillary cruisers. Fourteen fast mail steamers are provided with the necessary fittings, and their armaments are all in store ready to be sent on board at short notice.

GERMANY'S METHOD.

Germany enlists 5,000 men annually in the naval reserve, which gives a large body of trained men available for service. The coast defences are controlled and manned entirely by the navy.

All merchant steamers are enrolled and subject to service in time of war, their batteries, equipments and full complements of officers and men being all in readiness to be put on board, a thoroughness characteristic of the Germans.

ITALY'S PLAN.

Italy has a thorough organization, 210,000 men being enrolled ready for a call, a large number being drafted annually for five years service in the reserve. The government pays liberal navigation and construction bounties, an increase being allowed when steamers are specially designed for naval service, and the right is thus reserved to use all such vessels in time of war. The navy has complete charge of all coast defences, fortifications and torpedoes.

RUSSIA PREPARED.

Russia, with forty thousand men in her regular navy, has a large organized reserve of officers and men. The coast is divided into districts commanded by naval officers, except where the land defense is most important. The lighthouse, coast signal, life saving and hydrographic services are all controlled by the navy. The revenue service is manned by the navy and commanded by a flag officer, being used as a torpedo flotilla in time of war.

AUSTRIA FLEET.

Austria enlists 1,800 men annually for five years' service in the naval reserve. Fourteen thousand trained men are now in readiness to recruit the regular navy. The Harbor Masters' Service, Light House, Coast Signal and Custom House services are under naval control. The coast districts, with their defenses, are commanded by naval officers, a torpedo outfit, with the necessary personnel, being organized for each district. Austria reserves the right to use all merchant steamers for service in time of war.

SPAIN'S PROGRESSIVE POLICY.

Spain, a power with which we have had and may again have complications, has an organized reserve of fifty thousand men, called out for six weeks' drill each year. The Revenue Marine, Coast Signal Service, fisheries, guards, and pilots are controlled by the Navy Department and commanded by naval officers. The coast defenses are entrusted entirely to the navy, the divisions being commanded by flag officers of the navy. Liberal bounties are paid to merchant steamers, especially those on American lines, arrangements having been made with steamship companies to build their ships of steel or iron and with the strength necessary to carry heavy batteries for naval use.

SCANDINAVIA'S EXCELLENT SYSTEM.

Sweden has 80,000 men available for naval service. The Lighthouse, Coast Signals, Pilots, Harbor Master and Hydrographic services are all controlled by the Navy Department, which has complete control of the coast defenses, as in Germany, France, Italy and Spain. All desirable merchant steamers are enrolled for service, with torpedo and battery outfits in store. Norway has a reserve of 27,000 men.

Portugal has a reserve of 23,000, Greece 30,000 and Turkey 44,500. Japan has an excellent system and encourages the building of steam vessels, all such recently built being designed with a view to naval service.

PROVISIONS OF THE WHITTHORNE BILL.

The Whitthorne bill should be passed without delay. It provides for a naval reserve artillery to man guns on board naval vessels, and a naval reserve torpedo corps to manipulate torpedoes of all kinds along our coast. The coast will be divided into districts and men will be assigned to service nearest their homes. There will be annual drills and uniform instruction under the supervision of the Navy Department. There will also be a navigating naval reserve recruited from the merchant service, these men being enrolled and available for certain duties of a purely nautical nature. All available steamships are to be prepared for duty as auxiliary cruisers, bounty being paid for that purpose, and their equipments and crews will be kept in readiness.

WHERE OFFICERS COULD BE DRAWN FROM.

Many retied naval officers will render valuable service in the event of war. Graduates of the Naval Academy, who have resigned or been honorably discharged from service, should form a reserve list, ready for duty as officers. They should be given a small salary and be called out annually for instruction in the latest naval tactics of guns and torpedoes. Many yachtsmen and others who have the leisure and the inclination to study naval warfare could be added to the reserve list of officers as a result of examination as to proficiency. The cost of a naval reserve would be comparatively trifling—far less than that of the militia.

AN OBLIQUE MOVE.

BUFFALO, Oct. 3.

To the Editor of the Marine Record.

The reply to "Wheelropes" in your issue of the 27th was entirely wide of the mark, and I consider it simply a prevarication, as though the writer was trying to edge from one subject to another. The previous article published in your paper of August 23 dealt entirely (with the exception of a few lines) on the dishonesty of shipmasters, and their so called methods and tricks were exposed. We were told that the owner of a vessel on salt water is placed at the mercy of his captain, and the various harpies who prey on shipowners at every port. Also, that the modern European shipmaster has a poor reputation for honesty, inasmuch as he will present fictitious bills and swear to their having been paid, and again, that the master will sign away $100 of his owners money and only receive $25 of that amount for his own pocket, and this is done without the vessel receiving any corresponding value or services. Then we are told that if an owner suspects a master of these practicies and settles up accounts with him and pays him off he only does so to accept the services of a more qualified bird of prey. Again we are informed that if a captain is honest it is becaase he is either too stupid, ignorant, or too good natured, and that he will allow others to victimize the vessel and property to their heart's content; finally we are told that these practices cannot be carried by lake captains because they are always within reach. I believe I have quoted the former article literally; now, after protesting against such a construction being placed upon the character of a sturdy, honest class of gentlemen, I am told that the discussion of this matter would benefit no one; that it is only a side issue and that I had better leave a number of my acquaintances and friends rest under the imputation of being, well, dishonest, and extremely so at that.

As regards cooked accounts, the writer of the article says he declines to enter into any further discussion, although this subject was one of his strong points in the former letter, and the whole tone was directly opposed to the respectable and hard earned reputation of a splendid body of men. Although I do not claim that shipmasters are immaculate, yet I do say that a more cultivated, honest and able class of men in their own business are not to be found among any class of commercial men, or tradesmen on shore. However as all the cases in point have been so easily set aside, and the question of profitable ship owning is introduced, I wish to state that when vessel property can pay 25 per cent there is no room for argument and it certainly would be impossible to reconcile the ideas of a person who had to pay a wage bill for honest labor performed. If the majority of vessel owners and other employers of labor, hold his fellow men in such low estimation as my friend, and if he has met one dishonest man in his travels, and turned a misanthrope, it would be much better for the community if his warped skeins of human nature were kept to himself for there are men here and I might say in every city in the world who can speak in the highest terms of ship masters with whom they have traveled. Yours, etc. WHEELROPES.

IT is impossible to get correct soundings when a vessel is passing through the water quicker than a couple of knots an hour. A steamer should be stopped, and a sailing vessel luffed up before taking a cast of the lead if accuracy is desirable.

LAKE CARRIERS' ASSOCIATION

TO CONSIDER AND TAKE ACTION UPON ALL GENERAL QUESTIONS RELATING TO THE NAVIGATION AND CARRYING BUSINESS OF THE GREAT LAKES AND THE WATERS TRIBUTARY THERETO, WITH THE INTENT TO IMPROVE THE CHARACTER OF THE SERVICE RENDERED TO THE PUBLIC, TO PROTECT THE COMMON INTEREST OF LAKE CARRIERS, AND PROMOTE THEIR GENERAL WELFARE.

BOARD OF MANAGERS, 1888.

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MARINE RECORD—OFFICIAL PAPER.

LAKE CARRIERS' ASSOCIATION.

Special Report to the Marine Record.

BUFFALO, N. Y., September 26.

A meeting of the Board of managers of the Lake Carriers Association was held in the committee rooms of the Merchants' Exchange, Buffalo, at 2.30 p., m. September 26th, President Caldwell in the chair.

The obstruction of channels and harbors, in consequence of the overloading of vessels, was the first subject taken up. A letter was read from General Poe complaining that the St. Clair Flats canal had been again blocked on the 21st inst. in consequence of the grounding there of an overloaded vessel, and the question before the meeting was what can be done immediately to prevent the recurrence of such blockades. It was conceded that nothing could be done to prohibit absolutely the passage of overloaded vessels through the canal, but it was believed that an appeal by the board of managers to the good sense of the vessel owners would result in their seeing to it that master did not overload their vessels. Therefore, upon motion, the following resolutions were unanimously passed.

RESOLVED, That the board of managers of the Lake Carriers' Association, having in mind the best interests of the vessel owners of the lakes, request those owners to immediately instruct their masters to so load their vessels for the remainder of this season, that they will draw, on arrival at the St. Clair Flats canal, not to exceed fifteen feet six inches.

In reply to an inquiry as to what had been done towards placing the control of the canal in the hands of General Poe, it was explained that Mr. Caldwell had prepared and sent to Washington, on the 15th a bill placing the canal under the control of the secretary of war; that, mainly through the efforts of Major Farquhar, the bill passed the house of representatives on the 13th, and the senate on the 19th inst., and required now only the signature of the president. Several telegrams had since been sent by Mr. Caldwell, tracing the bill after passing the senate and urging that it be fowarded to the president for his signature, and the latest reply from Washington stated that it had been delivered to the committee on enrolled bills on the 22nd instant. When this bill becomes a law, as it must within a day or two, blockades in the canal will be a thing of the past, as General Poe will then have full power to enforce any orders he may deem necessary for the prevention of such blockades, and will undoubtedly prevent the passage through the canal of any vessel drawing more than fifteen feet six inches.

The grounding of the steamer J. Emery Owen at the St. Clair canal on October 2 and the more recent grounding of the same vessel in Buffalo river last Sunday, were referred to as being the worst cases of over loading on record this season, and the secretary was directed to write the owner of that vessel, reciting the incidents referred to, and asking him in his own interests as well as in the interests of other vessel owners, to instruct the masters of the steamers not to load deeper than fifteen feet six inches.

A communication from the treasury department in relation to regulating the towing of rafts, was read, but definite action upon that subject was deferred

The report of the committee on Inland Lloyds classification of vessels was read, and after discussion, was ordered referred back to the committee, with the request that they communicate with the underwriters, with reference to formulating some specific plan for carrying out their recommendations.

Attention was called to senate bill 2182, amending sections 4488 and 4489 of the revised statute, requiring steamers to carry on board line carrying projectiles and the means of propelling them, and it was stated that the bill had passed the Senate on the 25th inst. The managers present discussed the matter fully in all its bearings and finally passed the following resolutions:

WHEREAS, Senate bill 2182 amending sections 4488 and 4489 of the revised statutes, requiring steamers to carry on board line carrying projectiles and the means of propelling them, has passed the United States senate; and

WHEREAS, While believing that every possible means of saving life in case of disaster, should be adopted, this board has no knowledge of the value of the apparatus contemplated by the bill, and is entirely opposed to the adoption of needless inventions which benefit only the manufacturer of the same;

RESOLVED, That the board of managers of the Lake Carriers' Associations protests against the completion of this legislation at the present session of congress, in order that the vessel owners may have time to ascertain and give their views of the merits of these line carrying projectiles;

RESOLVED, That certified copies of these resolutions be sent to the President of the United States, to the committee on commerce, and to the senators and representatives from the districts represented in this association.

FORE AND AFT.

The Roanoke reports loss of Engineer Martin, off South Fox Island, last Wednesday night.

Steamship North Wind made the run from Detour to Fort Gratiot in fifteen hours and 5 minutes.

Captain Thomas Currie was on Monday made master of the propeller Porter Chamberlain at Buffalo.

Coal shipments from Buffalo from opening of navigation to date, 1,833,260 tons; against 2,382,000 for the same date last year.

The propeller Gogebic, bound for Escanaba light, ran aground during the fog Monday morning. She was soon released by the tug Owen.

The Fountain City has a loose wheel. The Idaho is towing her down. The Business was considerably shaken up by the heavy sea, and is leaking some.

Shipments by water from Saginaw River for the week ending September 28 are as follows: Lumber 16,100,000 feet, shingles 4,250,000 staves 61,000 feet.

Lumber is moving rapidly and vessels are in great demand. Freight rates have taken a raise and are now quoted at $1.75 to Ohio ports and $2.25 to Buffalo.

On or about Oct 1, the temporary light at the Thunder Bay river light station will be removed and a fixed red light of thefourth order put in its place.

Captain Alex Clarke of the Russia has been promoted to the Lackawanna vice Captain Davis. Captain A. B. Drake, for several years, on the excursion steamer Periwinkle goes on the Russia.

Mr John Demass, of Detroit, is reported as figuring on the purchase of the schooner Itasca. The price has been agreed, $7,500, but there was some difference as to the disposal of her coal freight.

The schooner Spaulding was fined $20 at Detroit for discharging a cargo without a permit. The steamer Nellie was fined the same amount for discharging baggage without a permit.

Shipments from the port of Bay City for September were 55.000,000 feet of lumber, 11.000,000 feet of shingles and 2,000,000 feet of lath. This is a slight increase over the same month last year.

The west end Detroit lumber shovers have adopted the following rates for unloading lumbor: Inch boards, 30 to 32c.; two-inch bill stuff, 35c; timber, 40c; lath, 7c; shingles 6c per 1,000. This is an advance of 2c. on inch stuff and 1c on lath.

The Erie life saving crew picked up a floater Monday. The face was worn away by the action of the water. One foot and one leg was encased in a long rubber boot. It is believed to be the body of a lake captain who was lost this summer off of a passing schooner.

The Buffalo Express says, the Chicago Tribune spies Managers Bullard and Evans in port, and in spite of denials from both, surmises that they are anxious over the threathened encroachments of "Hill boats" on their Lake Superior line, and are looking for means to conteract it.

The Kingston News says, Captain Davis is now engaged building a graving dock 150 by 40 feet. At the present low water there is seven feet of water on the sills. The dock, which will accomodate the old canalers, is situated just beyond Anglin's mill on the inside of the track.

James Ward. P. J. Ford, John Campbell and James N. Wright have instituted admiralty proceedings against the steamer Starucca for $28 salary. Deputy United States Marshal J. S. Eberman libeled the boat Monday afternoon, but her captain liberated her by giving bond in the sum of $200.

The Toronto Empire says: At the present time the water in the western channel is about 12 feet deep at its lowest point. In fact it is probably a couple of inches lower than 12 feet. In the spring it was 12 feet 6 inches, and this time last year it was 9 inches higher than it is at present. It is now going down slowly and will likely have a further decrease of a few inches.

An Amhurstburg despatch of the 27th says: The gale lowered the water over two feet this morning, making it difficult for large boats to get across Bar point. Several of them, including the Cumberland, Minneapolis and consort, grounded. To-night the water has come up over a foot, which will probably allow everything to proceed.

The Chicago board of marine underwriters held a meeting and adopted the following schedule of rates on grain, which went into effect at six o'clock Saturday evening: From Chicago to ports on Lake Michigan, 50c; to ports on Lake Superior, 80c; to Lake Huron, Sarnia and Detroit river, 65c; to Georgian bay, 75c; to Lake Erie, 75c; Ontario, 85c; Ogdensburg, 85c; Montreal, $1,50.

[Around the Lakes Continued from 1st Page.]

MUSKEGON.

Special to the Marine Record.

The foundation of the Hackly Library will be laid as soon as the plans are completed. It is to be granite, and a magnificent building in every respect. C. H. Hackly gave $100,000 for the purpose of a public library at one time, and 25,000 for books to go into the school library at another time. Mr. Hackly is of the firm of Hackly and Hume, one of the successful mill and vessel owners of this city. Mr. Hackly came to this city a number o years ago, and worked by days work, and went to school in the winter, and then kept books for his uncle, and by proving himself a strict and careful man, he is now one of the most successful business men of this city. Hackly and Hume have built two as fine houses as there is in the city, they stand side by side on Webster ave. and Sixth street. They are made of lumber of their own manufacture, and the carving in Hackley's is as nice as anything in the state of Michigan. It was started the spring of 1887, and it will be completed in about two or three months.

Sunday, September 30th., the saw mill owned by Torrent & McLaughlin, was burned to the ground. Loss will probably reach $40,000 insured.

The harbor tug John Martell caught on fire by a lamp exploding in the engine room, and she was burned to the waters edge before anything could be done. She was run into shallow water where her crew escaped. Partly insured

Schooner Archie B. McDougell has been hauled out of water, and is receiving a general over hhang he is owned by David Smith of t e, and will be ready for fall work in about ten days.

September 28th, the big boom has shut down for the season, and there is lots of idle men in the city.

The life savers on this shore have had a very good time so far, but now is the time they make up for lost time. TANNER.

SAND BEACH.

Special to the Marine Record.

The last week of September has been quite lively around the harbor. The following steamers and vessels sheltered here last week:

25. Frank R. Buell, Salina, Cuba, Mattie Spencer and part of a raft. 26. J. H. Magruder, Pandora, H. Moore, Garibaldi, Forester, Typho, S P. Asues, tug Onaping, City of Montreal, Keewatin. 27. R. Martin, Messenger and two, Mocking Bird, W. A. Moore, Flora Westford and two, Yosemite and two, S. J. Macy and one, L. Shickluna and one, Robert R. Rhodes, City of Mt. Clemens, Badger State, R. G. Stewart, schooner N. F. Merrick. 29. Mackinaw, City of Concord and one, Germania and four, William Cowie and two, the barge Atsunto of the Cowie's tow lost part of her deck load and was leaking badly but was pumped out by the life-saving crew and the leak stopped. Schooners M. F. Merrick, Three Brothers, A. Sumner and Michigan, Ogemaw and three, Sakie Shepherd, R. C. Brittain and two. 30. Lowell and five, H. C. Schnoor and one. The D. F. Row and three pulled inside the harbor but the wind shifted and they pulled out and on up the lake. Steamers J. S. Ruby, Warrington; schooners, C. Hart, George Irving, St. Lawrence, Eugena, Mary Hattie; steamer, Point Abino, Bessie, Champion.

The propellor Rhoda Emily run ashore above Point Hope this morning in a fog. She jetisoned a few hundred bushels of wheat and was pulled off by the barge J. S. Ruby and proceeded on down the lake. T.

SANILAC.

There has been a terrific storm raging here since early Monday evening. At 7 o'clock the life-saving crew from Sand Beach started out, and at 11 p. m. they rescued a crew of six men and one lady from the barge St. Clair. They were seen nearing this place at 7 o'clock Tuesday morning, and everything was made for their help. As the boat passed the end of the dock the captain rounded her up, to come up to the dock. Just as he did so a high breaker struck the boat, turning completely over. Everyone exbected her to right again, but she failed to do so. The entire crew belonging to the boat reached the shore, towing two of the other crew with them. The remainder, four men and one woman, were drowned near the shore. The names of the lost are: Captain C. H. Jones, of Bay City; Henery Anderson, of Australia, sailor; George M'Farlane, of Cleveland, sailor; Louis Fertaw, of Bay City, sailor; Julia Greawreath, of Sebewaing, cook: The rescued are, Maurice M'Kenna, of Bay City; John Rose, of Detroit. The bodies of the drowned have not yet been recovered. They St. Clair was 270 tons, built at Montreal by Cantin in 1854 and was owned by C. H. Wescott of Marine City. She classed B2 and was valued at $3,000.

BUFFALO.

The propeller Tom Adams was released by three tugs after twenty-four hours delay. While coming in with ore she went aground at the lower end of the creek early Tuesday morning. Hingston and Wood's dredge is at work on the bar and will remove it as soon as possible. This is the only spot in the harbor where trouble of this kind is experienced.

The propeller Scranton came out of the drydock Wednesday afternoon, completing repairs made necessary by striking at Grosse point last week.

HARBOR.

Special to the Marine Record.

The propeller Kate Butteroni is at Devney's shipyard for repairs having lost about fifty feet of rail, 22 stanchions and side bitts forward, the result of the recent St. Clair canal jam.

Wednesday, the 26th, as the schooner Helena was coming into port she dragged the bottom, which caused the tow line to part, letting the vessel drift on to the east bank directly over the wreck of the J. F. Joy. The wreck of the Joy lying where it does on the channel bank, is and will continue to be a terror to sailors until removed, a matter that should be attended to promptly. The Helena had no lines that would stand the strain to pull her in, consequently a hawser was borrowed from steamer Aurora and after two hours hard work the Helena was got off, and towed safely to her dock.

The P. H. Burwell and schooner Erie Belle coal laden, from Cleveland, sprung a leak in the gale of Wednesday night, the 26th, and in trying to make our harbor missed the pier and went on the beach near Fort Hill. The Belle had just been repaired to the extent of $1,800, and I understand carries $3,000 insurance.

The schooner Sumatra arrived off our port Sunday in a leaking condition, having on board a double crew to work the pumps. Heavy weather compelled her to lay at anchor until Monday when she was landed at her dock. J, A. F.

PORT HURON.

Special to the Marine Record.

The steamer Rhoda Emily stranded on Point aux Barque's reef, at 3 a, m. this morning. The cause being thick weather. The crew jettisoned 4,000 bushels of corn. She was released and started on her way by the steamer J. S. Ruby.

The Canadian steamer Lillie Smith is at Dunford & Alversons' repairing damages, received in collision with the car ferry at Detroit.

Ed. J. Kendall, the marine reporter, has placed a light ship on the head of Stag Island, St. Clair River. There will be displayed by night, two lights (red with a white one above) and during foggy weather a fog horn will blow four short blasts at intervals. The ship will be placed near the government stake. Captain D. Bell of Port Huron will be placed in charge.

The barge H. H. Kent is having a jibboom and topmast put in at Dunford & Alverson's drydock. She will be transformed into a schooner.

The tug Kittie Smoke is in the drydock receiving a general overhauling.

One of the worst gales for many years has been blowing since last night. It caught the propeller Lowell with six barges off Sand Beach, when she tried to enter the harbor but could not make the piers. She was towing the barges William Young, Lillie May, Seagull, Magnet, Cromwell, and St. Clair. The Cromwell is ashore about two miles below Sand Beach, the St. Clair at Rock Falls, the Lillie May went to anchor off Sand Beach. The Youug and Seagull are here all right. The Magnet came in at six o'clock leaking badly. The tug Spencer put her ashore to avoid sinking. At noon the propeller Oswego came along and rolled her over. She lays about a mile below here. The Canada propeller Matawan and consort Gibraltar went ashore at Sanilac, both a total loss. The schooner Racine is ashore on the reef below Sand Beach harbor. The propeller John B. Lyon towing the John M. Hutchinson, parted their tow line about twenty miles out on the bay last night. The Lyon arrived here at noon. Captain Todd took the tug Spencer and went to look for the Hutchinson, and found her about ten miles up the lake. The Lyon shifted her cargo. A small tug is ashore sixteen miles up the Canada shore.

The tug O. W. Cheney has been in the drydock receiving repairs to her stern and boiler. K.

PORT ARTHUR.

The Sentinel says the citizens of Port Arthur will be gratified to see that the department of public works is advertising for tenders for the construction of a further length of breakwater at this place. This, with the bonus to the Port Arthur, Duluth & Western railway, the appropriation made for the post office and customs house, and the already large expenditure made on the breakwater, should be pretty conclusive proof to most people that Sir John Macdonald and his ministers not only have every confidence in the future of the town, but are willing to assist liberally in promoting its growth. It is to be hoped some local contracter may secure this contract and thus give employment to our own men and have the necessary money used in the construction in our midst.

MARQUETTE.

The total lake shipments of ore from the Lake Superior mines for the week is 189,422 tons. Of this amount Marquette shipped 42,496 tons, Escanaba, 75,151 tons, St. Ignace 5,824 tons, Ashland 40,730 tons, and Two Harbors 25,221 tons. By range the total shipments are: Marquette range 1,334 397 tons, Gogebic 955,597 tons, Menominee 791,744 tons, Vermillion 279,186 tons, making a total season's shipments of 3,360,944 tons, being 129,888 tons less than at the corresponding date last year.

MILWAUKEE.

Special to the Marine Record.

Wolf & Davidson's new boat is ready and will be launched next Saturday. I will give a detailed description of her in my next.

We have had a severe storm on this lake for the last three days and the list of disasters will be long no doubt. The first on the list is the dismantling of the Canadian schooner A. Muir. She came in Tuesday minus nearly all of her standing rigging. The steamer Favorite was seven hours late from Muskegon, and the F. & P. M. boat was two hours lete. The barge Joys was in dock with a loose wheel and to do some caulking. The barge Starke was also in dock to stop a leak. The barge Wilson was in dock at W & D's for repairs to stern bearing and to stop a leak. The barge Fayette was in for a new set of crank pin brasses.

The coal receipts for this port to October 1st are about 720,000 tons and will be nearly 950,000 by the close of navigation.

The steambarge G. T. Hope is lying in the bay on account of the sea having parted her wheel chains shortly after letting go of her consort the Bacon.

The barge Almendinger is receiving a new crank at Sherriffs.

It is rumored that the Milwaukee Ship Yard Company will build another steambarge this winter.

To illustrate the fierceness of the gale it took the Western line steamer Buffalo hours to come in from the south point.

Business in the marine line begins to look up and I hope to chronicle something interesting in my next letter.

J. H. Jacobs of Marquette, Michigan, was in town and said he was intending to build a 1200 ton boat this winter.

Messrs Connelly & Rickertson have put their electric signals on the steambarge Helena. J.

MINORVILLE.

The wrecking tug Jessie Spalding, with steam pumps, lighter and hawser, left here Monday evening to release the schooner Fleetwing, ashore near Door bluffs. The lumber has been taken off the vessel's deck, and her hold is now being cleared. She lies broadside to the shore and has nine feet of water in her hold. If the wind is favorable it is thought she can be pumped out and released without much difficulty, as the water is very deep near the wreck She is insured.

ESCANABA.

The steamer Calumet is here in a disabled condition, her shaft being bent so that she cannot turn her wheel. She will go into drydock either at Manitowoc or Milwaukee.

ALPENA.

The propeller Wilson, which was reported lost with all hands, arrived here Wednesday morning with topmasts gone but otherwise uninjured.

We are indebted to General O. M. Poe for the following statistics of the commerce passing through Saint Mary's Falls canal during the month of September, 1888.

Number and class of vessels:—

Steamers	815
Sail vessels	300
Rafts and unregistered craft	47
Total	1164
Number of lockages	595
Total register d tonnage	829,230 tons
To al freight tonnage	983,935 "
Number of passengers	3,242

The commerce exceeded that for September of last year by 137,810 registered tons, and by 206,335 tons of freight.

The amount of last years business after September 30th was 22 per cent of the traffic for the whole season. If the commerce for the rest of the season is maintained at the same rate of increase that is shown up to September 30th, the freight tonnage will amount to 6,420,00 0 tons.

On the 30th of September, the commerce for the present season had reached 5,000,000 tons.

LAKE FREIGHTS.

Transactions in lake freights yesterday comprised but one charter for ore. From this, however, it is evident that the rate from Marquette is $1.55, and though no engagements were reported, rates from Escanaba and Ashland are said to be $1.35 and $1.65 The only ore charter reported was steamer Thomas S. Christie, Marquette to Ohio ports, $1.55.

BUFFALO, N. Y., October 3.—Coal freights steady and unchanged. Charters: Cuba, Flower, Chicago, 80c, Oneida, Crosthwaite, Ashland, 60c; Aurora, Duluth, 60; Baldwin. India, Portage, 75; Dashing Wave, Grace Whiting, Marquette, 75c; Itasca, Racine, 90c.

Canal freights lower. Wheat, 3½c, corn, 3⅛c to New York.

CHICAGO, October 3.—Grain freights were dull and inactive today, and though there was plenty of tonnage in port but few vessels were placed; rates were unchanged at 3c for corn and 3¼ for wheat to Buffalo.

Charters were: To Buffalo, Nevada, oats; Breden, corn; Packer corn; Syracuse, corn; to Port Huron, Wisconsin, oats.

THE rate of postage from England to India and China is twice as much as the rate on letters and newspapers from France to those countries.

MOUNT CENIS tunnel is 7¾ miles long and cost upwards of $15,000,000. St. Gothard is nine miles long and cost about $13,000,000.

ABOUT DELIGATES TO THE MARITIME CONVENTION.

The resolutions recently adopted by the Andrew Jackson League, urging the appointment of Colonel Robert Rae of Chicago, as a commissioner to Washington, meets with our entire approval. Colonel Ray has had large and varied experience in our maritime laws, and professional knowledge of the international marine laws must be an essential. The following resolution explains itself.

WHEREAS, Under a recent act of Congress the President of the United States is authorized to appoint commissioners to meet, in April next a convocation of commissioners appointed by the several maritime powers, to formulate "rules of the road" to prevent collisions at sea, and to prepare an international code; and

WHEREAS, Colonel Robert Rae, of Chicago, by reason of his training as an admiralty lawyer of the highest rank in his profession, coupled with his skill as a practical yachtsman and sailor, possesses peculiar qualifications which would make him invaluable as one of the said commissioners; and,

WHEREAS, Colonel Rae has given the subject of collisions at sea, their causes and remedy, a life long study, which would make his services invaluable in that domain of public interest which is second to none in the country; and

WHEREAS, We believe his appointment as one of the said commissioners would give general satisfaction, especially in this city, where his excellent qualificationa are recognized by all, therefore be it

Resolved, That the "Andrew Jackson League" urgently request President Cleveland to appoint Colonel Robert Rae as one of said commissioners.

QUALIFICATIONS OF SEAMEN.

It is to be hoped that the International Marine Conference will point out the necessity of laws to prevent color blind persons from being employed in any capacity on ship board. Everybody employed on board a vessel should have as near perfect sight and hearing as possibie.—*N. Y. Maritime Register.*

Editor of the Marine Record:

ASHTABULA, O., October 2.

It is almost enough to give any practical man the blues to read such an article as the above quoted from a responsible marine newspaper, in your issue of last week. Able seamen have always to be strong, robust and generally healthly men to stand the coarse food and hardships of a sea life, and if his sense of hearing is to be critically examined, and the smallest inaccuracy in his vison is to render him unfit to serve in the capacity of rope hauler, then I pity the outlook for this country's building up a large fleet of merchant vessels manaed with seamen. I should like to ask if any of your readers can inform me how the services of a modern Adonis can be bought night and day week in and week out for the petty pittance of from $12 to $20 per month, and in sufficient numbers to man a fleet of vessels. If the marine conference spoken of above is to undertake the work of retarding our maritime aspirations, and to harass the members of the community by useless and pernicious law clauses, then all right, let them go ahead. But on the other hand, if they intend to advance and facilitate the shipping interests of this nation, then such suggestions as the above ought not to be tolerated for a single instant. Yours, truly, A. M.

THE THREE L's.

To the Editor of the Marine Record,

DETROIT, MICH., October 1.—A sensational letter in your late issue seems to be full of inaccuracies, and having an hour at my disposal I have concluded to ask a few questions regarding the language made use of over the signature of R. Carolan, trusting that you will give my inquiries a space in the MARINE RECORD. In the first place under what circumstances are the compass and the chart of no use to the navigator, and if the lead is to be depended on as a life saving apparratus as suggested by P. C. What effect or how would he utilize the lead in case the vessel had sprung a leak, or was fast driving on a lee shore, or had parted from her anchors. Would he advise grasping a lead and knocking the crest of the waves on one side while he waded ashore in smooth water.

He says that the sailing master of to-day thinks himself too much of an expert to take a cast of the lead, well if P. C. had used the plummet and line around the lakes in the months of November and December as much as the writer has he might be inclined to think entirely the other way. In his estimation the stranding of vessels, collisions; and other accidents are due to the use of the terms port and starboard, and in nine cases out of ten the order given to the man at the wheel bears no relation to the casuality at all, and the meanining of the words port and starboard being admitted where does the danger exist if right and left are synonymous terms with port and starboard, where is the the necessity for a change, and if the change is of so much importance, how have navigators got along for such a length of time under the existing rules, and, perhaps, P. C. asks to have the words port and starboard abolished and speaks collectively as though a number required and advocated the change. While the fact is that probably no seamen except himself would countenance such a step. Yours truly RIP.

The mixed up case of the propeller Buckeye will be argued before Judge Blodgett at Chicago Monday. She burned while stranded on Manitoulin Island in June, 1885. She was insured for fire and marine risks seperately, and the companies could not agree whether she was burned because she stranded or could have been saved if she had not burned. Her marine insurance was $15,000 and her policies called for $12,000.

At the request of Sir John McDonald, Canadian forwarders have submitted to the federal government for transmission to the imperial authorities information as to the manner in which they have been treated in their business with the New York State canals. One forwarder, in his statement as to the government, declares that the Erie canal has been closed against his vessels, despite the stipulation in the treaty of Washington by which the United States government undertook to urge upon the state authorities the advisability of making the state canals free to Canadian vessels.

HOLLAND.

The schooner Australia went ashore Monday six miles south of the harbor. She will probably be a total loss. The crew was taken off by the life saving crew. The Australia is owned in Chicago. She was built in 1862 and had no rating in the Inland Lloyds. The life boat also boarded an abandoned tow barge north of the harbor, two miles from land. She was waterlogged and her name could not be ascertained. She had evidently been in collision, as the bow was stove in. The hold was full of lumber.

OWEN SOUND.

The steamer Baltic went in the dry-dock here Monday and upon examination it was found that she was more damaged than at first reported. Her forefoot is gone altogether, and her keel to the fore about 35 feet. Her garboard strakes forward on both sides are so badly broken that new ones will have to be put in. Aft her keel is split for about 15 feet, and her bulwarks from the wheel-boxes are gone. The stanchions and all are cleaned out, leaving the guard in very bad shape, and her steerage cabin is considerably damaged. Her arches also are broken. Her bottom plank is in very good condition. The damage to her bulwarks guard, cabin, and arches was caused by the boats bulling her off. It will take two weeks at least to repair her.

GORDON BENNETT'S yacht Namouna passed through the Suez canal on the night of the 29th of January, 1887, in 13 hours and 52 minutes.

THE first experimental trial of a screw propeller was in 1840.

Meteorological summary for the week ending October 2, 1888:

Mean actual barometer	29.88
Mean temperature	5.10
Mean humidity	65.4
Total precipitation	1 40
Prevailing direction of wind	N.W.
Total wind movement	1964
Av. cloudiness	6.6
Av state of weather	Cloudy
Max. temperature, highest	74.0
Min temperature, lowest	38.0

W. H. HAMMON, Sergt Sig. Corps, U. S. A.

CATARRH CURED.

A clergyman, after years of suffering from that loathsome disease, Catarrh, and vainly trying every known remedy, at last found a prescription which completely cured and saved him from death. Any sufferer from this dreadful disease sending a self addressed stamped envelope to professor J. A. Lawrence, 212 East 9th St., New York, will receive the recipe free of charge.

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direct communication with

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and

Frank Perry's Tug Office

SAULT STE MARIE.

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Stationed at Detour. Office open day and night.

PROPOSALS FOR SAND, etc. U. S. Engineer Office, Buffalo, N, Y., October 1, 1888. Sealed proposals in triplicate will be received at this office until 11 a. m., eastern standard time, on December 1, 1888, for furnishing sand, pebbles, stone and cement required in the reconstruction of the breakwater at Buffalo N. Y. All necessary information may be obtained on application to the undersigned. F. A. MAHAN, Captain of Engineers.

PROPOSALS FOR REPAIRS &c. U. S Engineer Office, 89 Euclid avenue, Cleveland, Ohio, September 20, 1888 Separate sealed proposals, in duplicate will be received at this office, until 12 o'clock Monday, October 8, 1888 at which time they will be opened in presence of bidders, for repairs at the following harbors; At Monroe, Michigan; at Huron Ohio; at Port Clinton, Ohio Proposals will be accompanied by a written guarantee that in case bid be accepted, contract will be entered into with good and sufficient security within ten (10) days after notice of such acceptance. Forms, specifications and other information can be obtained at this office. The United States reserves the right to reject any or all proposals. L. COOPER OVERMAN, Major of Engineers

First-class Merchant Tailoring.

Done in the nobbiest style, according to monthly new fashion plates; made by none but first-class mechanics and none delivered unless to the entire taste of the Customer, can be procured by *Jos. L. Kohn*, practical tailor and cutter at the tailoring department of *Kohn & Co.*, 213 Detroit street, second door from corner Pearl known as Boston Dry Goods Store, Cleveland, O.

In the rear of the above Store a fine stock of the latest patterns of *Cassimeres*, Cloths, *Over Goatings*, *Silk Vestings*, can be found and owing to the fact, that this young genius of a garment cutter Mr. Jos. L. Kohn does his own cutting, (which alone saves $30 per week) and has the appartment in the above Store free of any expense it enables him to Save the Customers from $6 to $10 on every Suit of Clothes. Convince yourself by calling at 213 Detroit street, second door from corner Pearl known as Boston Dry Goods Store of KOHN & CO., Cleveland, O.

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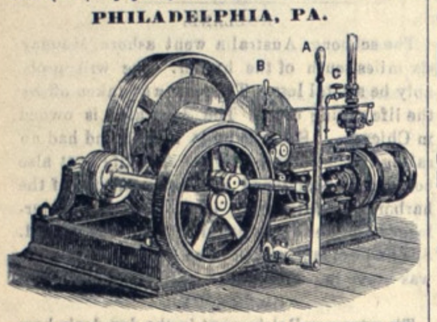
COR. RICHMOND AND YORK STS.,
PHILADELPHIA, PA.



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LEAVES CLEVELAND EVERY FRIDAY AT 8 P. M., CITY TIME,
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Second Edition, Revised and Enlarged,
With new Maps and Illustrations corrected to the opening of Navigation in 1888,
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THE HANDSOME NEW FORE AND AFT SCHOONER W. C. Kimball, built at Manitowoc last winter, outfit all new and complete, 65 feet over all, 17 feet 4 inches beam, 4 feet 9 inches hold. Tonnage 31, 40 Apply to A. D JOHNSTON, Manitowoc, Wis.

YACHT FOR SALE.

SLOOP YACHT NORDEN, 45 feet water line, 13½ feet beam, in first-class sailing condition, for want of time to run, is offered for sale at a bargain. Address F.W. FINCHER, Pentwater, Mich.

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THE TUG MYRTLE, of Sandusky, Ohio, for sale cheap. Is in first-class condition. For particulars write to FRED GROCH, Sandusky, O.

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BARGE COL. BRACKET—She carries 260M feet of lumber, 420 tons of coal. Had $900 worth of repairs last season. Fit out good. Price $1,600. Mention this paper. ED. J. KENDALL, Port Huron.

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A steam barge 125 thousand capacity; will carry 120 passengers, only one year old; a good twelve mile boat in the best possible condition; will be sold reasonable and on easy terms. For further particulars inquire of MARINE RECORD, Cleveland Ohio.

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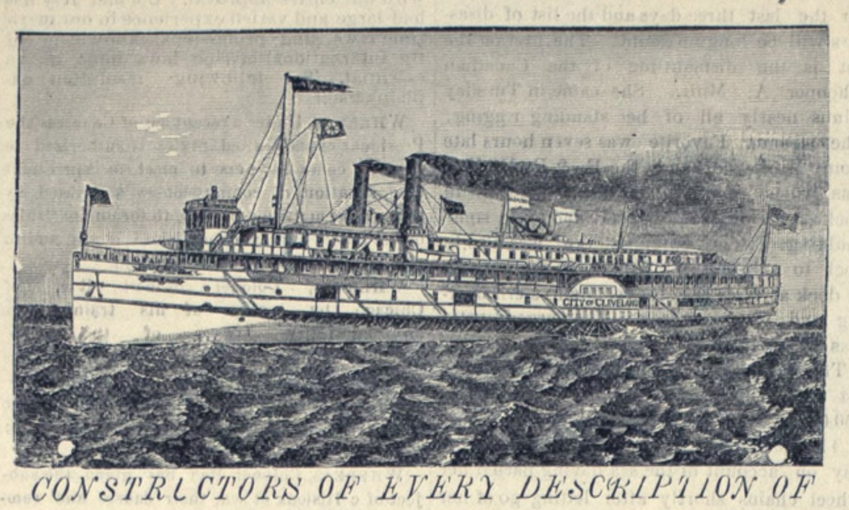

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Improved Horizontal Straight Base Hydraulic Jacks.
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WRECKING TUG
LEVIATHAN, CAPT. M. SWAIN, STATIONED AT CHEBOYGAN
With plenty of Wrecking Material on board and in Warehouse.

A PUZZLE.

Which Man is the Tallest?

If you measure carefully the figures in this cut you will find that the man who appears the shortest is in reality the tallest. If you will coal your boats at my dock, adjoining S. F. Hodge Iron Works, you will get better dispatch and better COAL than at any other place in the city.

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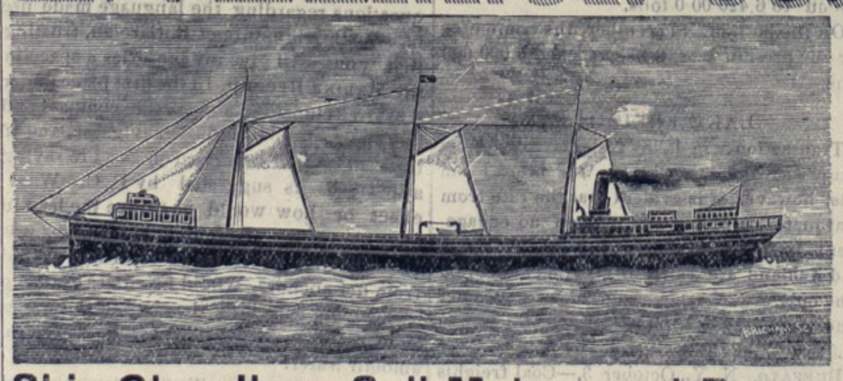

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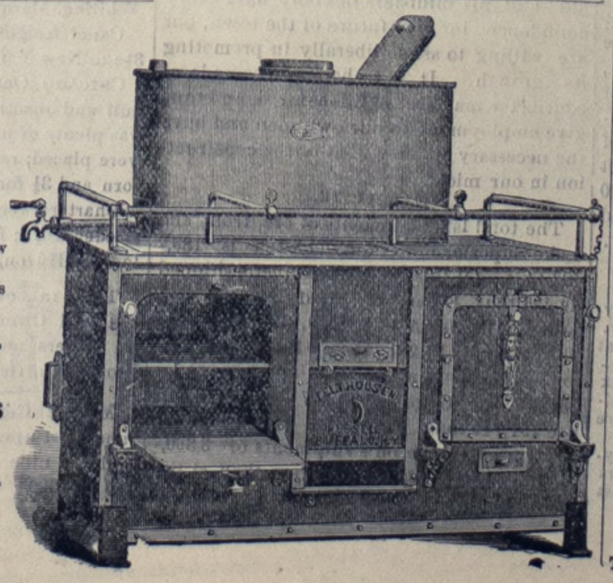
39 & 141 MAIN ST., BUFFALO, N. Y.



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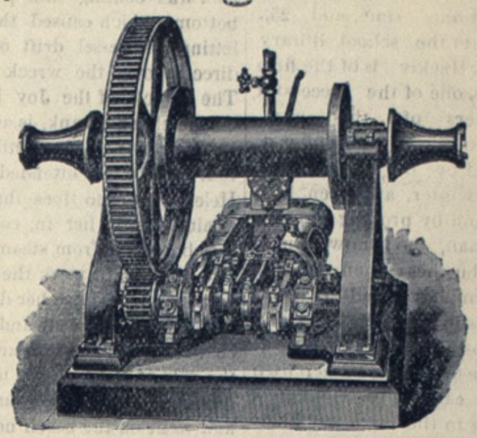

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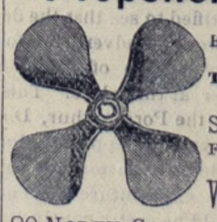

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And Synopsis of Marine Laws. Every vessel man wants one. For sale by marine clerk at all custom houses. Price 50c. See it.

Lake Shore & Michigan Southern.

Commencing Monday July 13, 1888. The time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No 4, Fast Limited Express	*2 55 A M	*2 55 A M
No. 6 N. Y. & Boston Ex	*1 35 A M	*1 40 A M
No 8, N. Y. B & A Express	*8 25 A M	*8 50 A M
No 26, Elyria Accommodation	†7 45 A M	
No 10, Toledo Ac'm via Sandusky	†11 05 A M	
No 10, Toledo Accom via Norwark	†11 05 A M	
No. 24, Buffalo Accommodation		† 7 00 A M
No. 10, New York & Boston, "Flyer"		*11 50 A M
No 12, N Y & B Fast Express	*2 35 P M	3* 45 P M
No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky	†9 40 P M	
No 26, Conneaut Accommodation	†4 25 P M	
Westward.	**Arrive,**	**Depart,**
No 1, Fast Limited Express	*12 15 A M	*12 15 A M
No. 23, Cleveland Express	*2 15 A M	
No 3, Chicago Express via "	‡5 30 A M	5 45 A M
No 25, Mich Accom Norwalk		†5 45 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 20 P M
No 5, St Louis Ex via Sandusky	*10 50 A M	*10 55 A M
No 9, Chi Pac Ex via Norwalk	*6 55 P M	*7 15 P M
No 31, Elyria ac to Elyria only		†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	

Sunday train for Nottingham—Depart 9:20 a. m. and 1:00 p. m.; returning, arrive at 9:20 a. m. and 4:45 p. m.

Reference marks—* Daily, † daily, except Sunday, ‡ daily, except Monday.

A local Cleveland and New York sleeper, also sleeper for Boston, and dining car daily on No. 10, leaving Cleveland at 11 50 A M.; arrive Grand Central depot, New York, 7.30 a. m.

For full information as to trains and connections apply at the Union ticket office, corner Bank and Superior streets, under Mercantile Bank.

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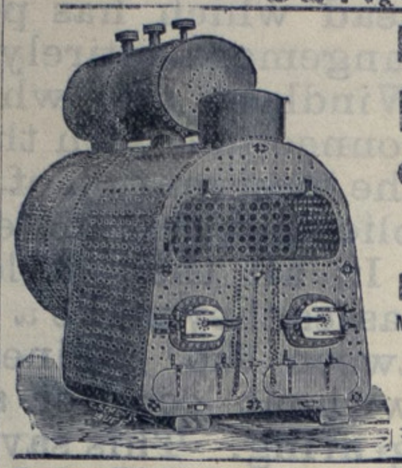
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OUTFITS FOR VESSELS A SPECIALTY.
We make the most durable grade of Blocks to be obtained in the market. Call for our SELF ADJUSTABLE FIVE ROLL ROLLER BUSHED STAR BRAND BLOCKS AND DO AWAY WITH REPAIRS.

Money Saved, Money Gained, Money Well Spent
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MANUFACTURERS AND DEALERS IN FINE CYLINDER, ENGINE, LARD, BLACK OILS, WATER-PROOF GREASE PACKING & WIPES. RAILROAD, STEAM BOAT AND ENGINEERS' SUPPLIES.

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Yearly Contracts a Specialty.
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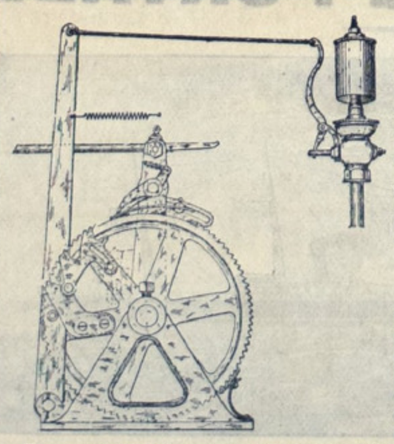
Steamboats, Tugs, etc, Coaled Day and Night.
DEALERS IN LACKAWANNA ANTHRACITE COAL.
Woks: Ft. West River St., Whisky Island, C. P. R'y. Slip, Government Pier
OFFICE 130 RIVER-ST., CLEVELAND, OHIO.

Chase Fog Whistle Machine



This machine has been placed on the following steamboats during the past year: SPOKANE, WALLULA, KASOTA, CHARLEMAGNE TOWER, JR, YAKIMA, MISSOULA, SITKA, FAYETTE BROWN, R. J. HACKETT, FOREST CITY, SPARTA, HAVANA, VIENNA, OSCAR TOWNSEND, CITY OF CLEVELAND, HENRY CHISHOLM, SUPERIOR, E. B. HALE, M. B. GROVER, J. S FAY, R. P. KANNEY, SMITH MOORE, CHARLES J SHEFFIELD, IRA H. OWEN, CAMBRIA, CORSICA, J. H. OUTHWAITE, SAMUEL MATHER, R. R. RHODES, COLUMBIA, AURORA, OHIO, WM. EDWARDS, S. E. SHELDON, AUSTRALASIA, RALEIGH, BULGARIA, ROUMANIA, J. F. EDDY, HIAWATHA, THOS. ADAMS, A. P. WRIGHT, GLADSTONE, E. P. WILBUR, SOO CITY, E. M. PECK, ROBERT L. FREYER AND NORTHERN LIGHT,

To the President and Board of Supervising Inspectors of Steam Vessels:

Your committee to which was referred the 'Chase Fog Whistle Machine" beg leave to report: "That we have carefully examined the same and find that it blows at regular intervals, being worked by the engine, thereby insuring regular and continuous blasts for any length of time that may be required and would recommend it or similar device to owners of steam vessels as an additional safeguard to navigation.

H. S. LUBBOCK,
GEO. H. STARBUCK, } Committee.
W. D. ROBINSON,

The manufacturers are the Chase Fog Whistle Machine Co., corner of Elm and Spruce streets, Cleveland, O.

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THOMAS LIGGET, Prop'r.
MAMTFACTURER AND JOBRER OF
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SOLE MANUFACTURERS OF
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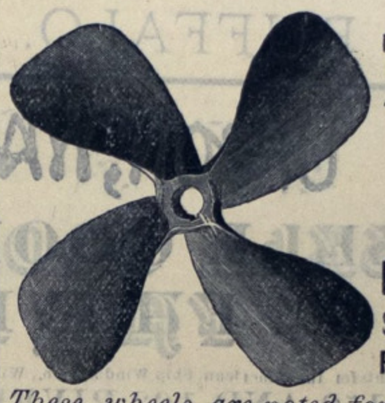
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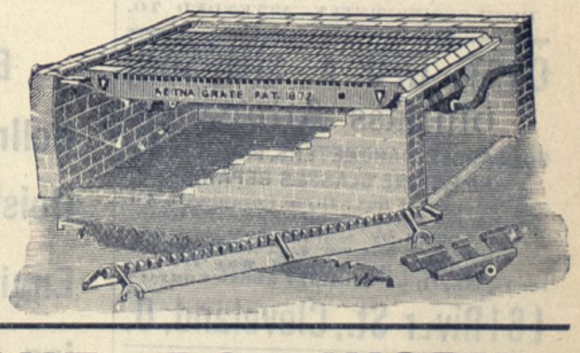

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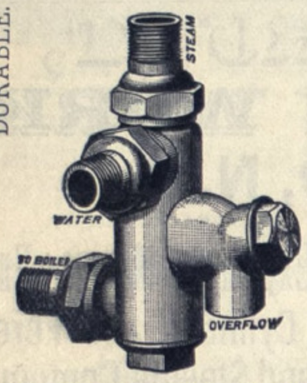

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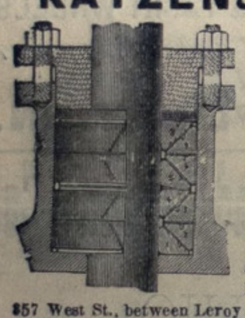

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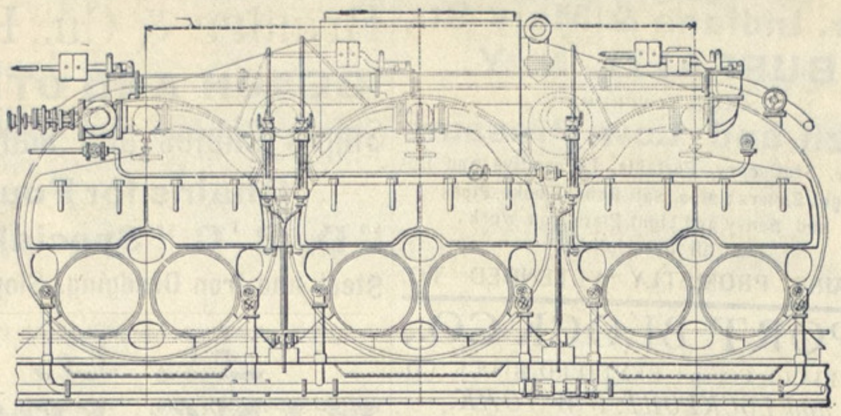

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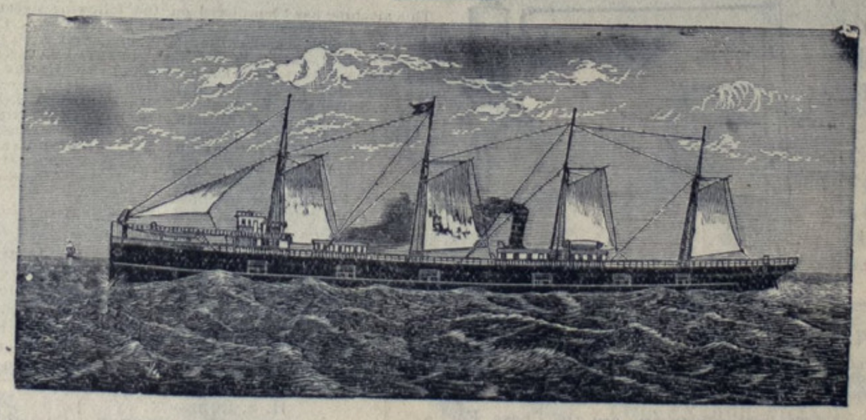

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